

Towards an operational understanding of wellness

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Despite the increased focus on wellness and wellness programs there is still no consensus as to what wellness is. This is in part because programs do not define wellness and in part because studies and programs employ vastly different outcome measures that arguably reflect other constructs such as health, well-being, and quality of life. In this paper, we suggest an operational understanding of wellness and show how wellness differs from health, quality of life and well-being. Academic literature on the subject of health, wellness, well-being and quality of life reveals confusion, as theorists and researchers frequently describe each of these constructs in a very similar manner. We argue that elements such as the context and target population in which the term wellness is used are critical for our understanding of the construct. While it is inevitable that cross-over exists between similar constructs, wellness does have distinctly identifiable features. These include: being both holistic and multidimensional, being focused on lifestyle behaviours, being about actions or processes, recognising the inter-relatedness between person and environment, and being unique by way of goal and context.

Keywords: Wellness, Spirituality, Operational Understanding, Organisations

BACKGROUND

Wellness is currently receiving substantial attention, particularly regarding intervention programs designed to facilitate the adoption of positive lifestyle behaviours (Hettler, 1980; Miller, Martens, & Gilman, 2008; Smith-Adcock, Webster, Leonard, & Walker, 2008). Wellness programs and services run by organisations have proven to be particularly popular as enjoyable and accessible programs where participants can learn about and practise healthy living. While wellness is traditionally perceived to be multidimensional, in the main, organisational programs have emphasised physical wellness, and may include activities such as aerobic fitness, health, nutrition, weight management, musculoskeletal conditioning and stress management (Clark et al., 2011). The evidence suggests that such programs have considerable health benefits for workers (Williams & Bruno, 2007). For example, one longitudinal program conducted over eight years reported improvements in BMI, blood pressure, and cholesterol (Hyatt Neville, Merrill, & Kumpfer, 2011). The implications from a management perspective from such programs are vast. Organisational benefits are reflected in the lowering of organisational healthcare costs and presenteeism, and an improvement in work productivity (Baicker, Cutler, & Song, 2010; Clark et al., 2011). Baicker, Cutler, and Song (2010) undertook a meta-analysis and found that for every dollar spent on a wellness program, \$3.27 was saved on medical costs and \$2.73 on absenteeism. Recent studies have also estimated the average savings in annual medical costs within organisations to be as much as 18.4% (Blonick, Millard, & Dugas, 2013).

Successful workplace wellness programs are characterised by two key features. Firstly, most programs commence with an initial (or baseline) health risk assessment (Baicker, Cutler, & Song, 2010). These assessments are usually a requirement, and can be re-tested during follow-up assessments to determine the

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extent of the effect of the program. The results from such assessments can then be used to identify potential risk factors that can motivate program participants to achieve behaviour change (Hyatt Neville et al., 2011; Machen, Cuddihy, Reaburn, & Higgins, 2010). Secondly, the majority of programs include an educative component which may be comprised of self-help education materials, individual counselling or coaching, group seminars and classes, or a combination of these (Hyatt Neville et al., 2011; Machen et al., 2010; Tanigoshi, Kontos, & Remley, 2007). Tanigoshi, Kontos, and Remley (2007) used a series of wellness counselling sessions to effectively increase wellness among law enforcement officers when compared to a control group; Choate and Smith (2003) infused a wellness model into the curriculum design of a first-year college course as a framework to address student needs; and Smith-Adcock, Webster, Leonard, and Walker (2008) examined a group counselling intervention developed to promote wellness among adolescent girls at risk of delinquency. As demonstrated, features such as multiple assessment points and the presence of an educative component (via a number of mechanisms) exist throughout numerous programs across a diverse range of settings.

In summary, programs designed to enhance wellness in an organisational context are enjoying considerable growth. This perhaps is epitomised by the recently announced United States “Federal Grants to Small Employers for Comprehensive Wellness Programs” Section 10408 of the *Patient Protection and Affordable Care Act*, titled “Grants for Small Businesses to Provide Comprehensive Workplace Wellness Programs,” which authorises appropriations of \$US200 million for the period of 2011 through 2015 to provide grants to help small business implement comprehensive wellness programs (O'Donnell, 2010). Despite the increased focus on wellness and wellness programs, there are still a number of uncertainties that hinder the effective implementation of quality wellness programs. First, there is still no consensus as to what wellness is, and as a result, studies that assume a wellness focus are often hard to differentiate from studies that pertain to health, quality of life (QOL) and well-being. Second, wellness studies and programs employ vastly different outcome measures that arguably better reflect health, well-being, and QOL. Third, wellness programs seem to have adopted a limited understanding of wellness and have focused on physical health to the detriment of other potentially more powerful wellness-related domains, such as spiritual wellness. In essence there is confusion in the literature regarding distinctions between wellness, health, QOL and well-being, and little attempt in practice to move beyond improving physical health. Consequently, there is little agreement on the precise meaning of wellness.

The role of management within workplace wellness programs is significant, given their centralised role within such programs, and the potential benefits obtained from well-planned and executed programs. Leaders have an important role to play in ensuring wellness programs are effectively implemented and that organisations and followers benefit from the programs. Leaders within organisations are critical to employee health. Evidence suggests that within organisations leaders and employees are not independent, and that leaders can affect employee health and well-being (Kuoppala, 2008). Leaders have the ability to engage with employees, and create wellness culture within an organisation (Lovelace, Manz, & Alves, 2007).

However, to maximise benefits it is imperative that organisational leaders and researchers agree on a definition of wellness to facilitate comparison of research findings, program implementation and program evaluation. Consensus could facilitate an agreed-upon theoretical model against which wellness instruments could be validated, thus providing a clear basis for the evaluation of wellness research and interventions. In this paper we outline an understanding of wellness by comparing the construct to health, QOL and well-being and suggest how organisations can best utilise this understanding to develop effective wellness programs.

DISCUSSION: WELLNESS: A BRIEF HISTORY

Modern perspectives in the study of wellness began in parallel with the positive health movement which came about as a result of changes in the World Health Organization's (WHO) definition of Health. In 1946 the WHO changed the definition of health so that it reflected not just the absence of disease, but complete physical, psychological, and social well-being (World Health Organization, 1946). Currently, there are numerous theories and models claiming to represent wellness; however, they are all linked by a focus on lifestyle dimensions (Adams, Bezner, & Steinhardt, 1997; Coatsworth, Palen, Sharp, & Ferrer-Wreder, 2006; Crose, Nicholas, Gobble, & Frank, 1992; Depken, 1994; Greenberg, 1985; Hettler, 1980; Lafferty, 1979; Leafgren, 1990; Myers & Sweeney, 2004; Renger et al., 2000; Witmer & Sweeney, 1992). Traditional views of wellness generally include those by Dunn (1959), who first defined wellness as a dynamic process maximising an individual's potential, and by Hettler (1980), who stated that wellness can be defined as an active process through which the individual becomes aware of and makes choices toward a more successful existence. Although the WHO does

not intend its 2006 definition to be exhaustive or scientific, it defines wellness as:

the optimal state of health of individuals and groups. There are two focal concerns: the realization of the fullest potential of an individual physically, psychologically, socially, spiritually and economically, and the fulfilment of one's role expectations in the family, community, place of worship, workplace and other settings. (Smith, Tang, & Nutbeam, 2006).

From a scientific perspective, Roscoe (2009) undertook what she considered the first of many steps to clarify the wellness construct. Notably, Roscoe's findings suggested that wellness studies: 1) had minimal empirical exploration of the structure and dimensions of wellness; 2) were predominantly informed by conceptual untested theories; and 3) do not investigate the nature of wellness: rather, they explore properties of the instruments. Roscoe proposed the need for an integrated definition of the construct.

As suggested by the definitions above, the majority of theories (Adams, et al., 1997; Crose, et al., 1992; Depken, 1994; Greenberg, 1985; Hettler, 1980; Lafferty, 1979; Leafgren, 1990; Renger, et al., 2000) divide wellness into individually oriented and interrelated dimensions. In the main these dimensions are: social wellness, emotional wellness, physical wellness, intellectual wellness, and spiritual wellness (Roscoe, 2009). Some also contain a psychological wellness dimension (Adams, et al., 1997). Models such as those by Crose et al. (1992), Hettler (1980), Leafgren (1990), and Renger et al. (2000) include dimensions where the individual is regarded as functioning within a specific salient context such as occupational (Crose et al., 1992; Hettler, 1980; Leafgren, 1990), and environmental (Renger et al., 2000) wellness.

Many wellness models place particular importance on spirituality and use this dimension as the core of their model (Eberst, 1984; Myers, Sweeney & Witmer, 2000). Eberst (1984) integrates spirituality as the animating force, activating principles and sense of significance. In their Wheel of Wellness model, Myers et al. (2000) incorporate spirituality as the first of five major life tasks (followed by self-direction, work and leisure, friendship and love) which are believed to be a central characteristic of one's personal beliefs and values. These life tasks are considered to be directly amendable via interventions. They define spirituality as an awareness of a being or force that transcends the material aspects of life and gives a deep sense of wholeness or connectedness to the universe (Myers, Sweeney & Witmer, 2000). How spirituality applies to the wellness context is similar to its stated existence within leaders, organisations and the community. Harmer (2010) proposes a holistic conceptual framework that provides a structured approach, grounded in spirituality, for developing leaders' systematic thinking capacity, as well as a framework for plotting one's spiritual growth trajectory within the context of leader and leadership development. Given the centrality of spirituality to wellness models, and the proposed inter-relationships between facets that comprise these models, it is likely that interventions targeting spirituality have a greater potential to influence the overall wellness of participants.

A review of the academic literature reveals confusion, as theorists frequently use a range of health-related terms to describe each other. Similarly, studies purporting to investigate one construct often use instruments designed to measure another. The Wheel of Wellness model (Sweeney & Witmer, 1991), for example, is said to have an established empirical link with enhanced QOL and well-being. Similarly the Indivisible Self model, developed from data collected from the Wellness Evaluation of Lifestyle questionnaire (Myers & Sweeney, 2004), is claimed to represent a way of life oriented toward optimal health and well-being. Wellness is also said to: embody a way of living designed to improve QOL (Renger et al., 2000); be a way of life oriented towards health and well-being (Myers, Sweeney & Luecht, 2004); and be strongly consonant with subjective well-being, life satisfaction and developmental assets (Coatsworth et al., 2006).

Health has also been defined in similar terms. For example, the WHO describes health as complete physical, psychological, and social well-being (World Health Organization, 1946). Easthope and White (2006) present well-being as strongly connected to health. In contrast, Diener and Eunkook (2000) view an individual's perception of their own well-being as representing their QOL. QOL and well-being have also been used as descriptors of wellness (Corbin & Pangrazi, 2001). Health-Related Quality of Life is said to refer specifically to functional health status and well-being (Fontaine & Barofsky, 2001).

This lack of precise definition has made evidence-based practical applications of wellness programs in organisations difficult to initiate and support through research outcomes. For example, the appropriate distribution of the aforementioned funds for wellness workplace programs in the US (O'Donnell, 2010) is dependent upon a consensual definition of wellness, and what such a program may comprise. Conversely, the direction of this funding may have been naively allocated for potentially unintended purposes. In the following

sections we briefly synthesise definitions of health, QOL and well-being with the aim of determining an understanding of wellness.

HEALTH

Differentiation between the definitions of wellness and health has previously been identified as problematic (Mackey, 2000). Traditionally health has been conceptualised and evaluated from an illness perspective (Breslow, 1972). When a person is deemed to have good health it invariably means that the person is not suffering from any identifiable disease. Furthermore, an improvement in that person's health is traditionally understood to mean that the disease is less severe (Breslow, 1972). This pathological focus of health likely arose from the fact that the predominant health problem facing society, and in particular medicine, has been overcoming infectious disease (Breslow, 1972). This model has been highly productive in the advancement of medical sciences, preventing and curing diseases and prolonging life. It does not, however, allow for optimal functioning beyond lack of illness. The health perspective does not allow for the journey towards optimal functioning.

QUALITY OF LIFE

QOL has been described as elusive, approachable at varying levels of generality from the assessment of societal or community well-being, to the specific evaluation of the situations of individuals or groups (Felce & Perry, 1995). These societal and individualistic perspectives have intensified the diversity of both operational definitions of QOL, and applicable theoretical models or academic orientations (Felce & Perry, 1995). The field of medicine adapted QOL and created Health-Related Quality of Life (HRQOL). This term focuses on an individual's functional health status, usually with reference to illness or recovery from a disease. This includes evaluation of symptoms, physical function, cognitive performance, psychological condition, emotional status and adaptation to disease (Gupta & Kant, 2009). Both QOL and HRQOL have gained in popularity in recent times due to their application in quantifying the status of an individual, especially in health care settings.

Measurement tools have been developed to measure these concepts. Such tools are being used by healthcare services to analyse the effectiveness of interventions, treatment decisions, and new medical technologies (Bravo Vergel & Sculpher, 2008). Cost-effectiveness is determined by quality-adjusted life years (QALY), and increase in life expectancy (Bravo Vergel & Sculpher, 2008). Briefly, QALY is a composite measure of outcome for use in healthcare economic evaluation studies, with measured or judged HRQOL weights for health states (on a 0-1 scale) used to adjust survival times (Weinstein & Stason, 1977). By plotting the HRQOL weight (also called utility score) for each healthcare intervention against the year in which the health outcome is obtained, a profile can be constructed comparing the consequences of one intervention to another (Bravo Vergel & Sculpher, 2008). The advantage of using the QALY measure is that it can simultaneously capture and aggregate gains in terms of both morbidity (HRQOL) and mortality (quantity) (Bravo Vergel & Sculpher, 2008).

QOL focuses on conditions that impact upon the functional status of the individual but typically does not allow for life fulfilment, but rather directs attention to the ability to complete physical tasks, activities of daily living and the avoidance of non-communicable diseases.

WELL-BEING

Two central perspectives of well-being have been distinguished: hedonic and eudaimonic (Ryan & Deci, 2001). While these perspectives overlap, they are founded on different philosophical orientations regarding human needs and desires. The hedonic perspective is that well-being consists of pleasure or happiness, with these emotions being viewed as the essential goal of human life (Ryan & Deci, 2001). Well-being is therefore achieved by increasing happiness through striving for pleasurable moments and approaching stimuli that increase positive affect (Lundqvist, 2011). In contrast, the eudaimonic tradition considers well-being as the extent to which an individual develops their potential congruent with their values and engagements (Ryan & Deci, 2001; Ryff, 2004). These two traditional views of well-being are founded on distinct views of human nature and of what constitutes a good society (Ryan & Deci, 2001). They pose different questions concerning how developmental and social processes relate to well-being, and prescribe different approaches to the enterprise of living (Ryan & Deci, 2001). However, evidence from a number of investigators has indicated that well-being is most likely best conceived as a multidimensional phenomenon that includes aspects of both the hedonic and eudaimonic conceptions (Ryan & Deci, 2001). In more recent shifts in the definition of well-being, Seligman (2011) argues for greater focus on relationships, and accomplishment, while Jayawickreme, Forgeard

and Seligman (2012) additionally include positive emotion, engagement and meaning.

As with QOL, the term well-being is sometimes further qualified, giving rise to terms such as psychological well-being and subjective well-being. Psychological well-being is deemed a multidimensional construct encompassing six outcomes: autonomy, personal growth, self-acceptance, life purpose, mastery, and positive relatedness (Ryff & Keyes, 1995). These six dimensions define psychological well-being both theoretically and operationally. It is suggested that high-level emotional and physical health are promoted through the attainment of these six outcomes (Ryff & Singer, 1998).

Subjective well-being consists of three components: life satisfaction, the presence of positive mood and the absence of negative mood, together often summarised as happiness (Ryan & Deci, 2001). These conceptual underpinnings of subjective well-being limit its use to the hedonic context. There has been much debate regarding the validity of measures of subjective well-being to define psychological wellness (Ryff & Singer, 1998). Three possibilities can be identified: 1) the hedonic view and subjective well-being could be used as an indicator of well-being; 2) subjective well-being could be an operational definition of well-being, while still endorsing the eudaimonic view of what fosters subjective well-being; and 3) the measure of subjective well-being as an indicator of well-being could be rejected, while arguing against hedonic principles as the vehicle to produce well-being (Ryan & Deci, 2001).

In all of the perspectives considered, however, well-being is considered an outcome measure. There is little room for independent or process variables where manipulation of particular dimensions can effect whole individual changes.

AN OPERATIONAL UNDERSTANDING OF WELLNESS

There are currently a number of wellness models which place individuals on a uni-dimensional scale where the individual is either on, or in-between, an ill-health-wellness scale (Travis, 1977). These perspectives on wellness do not allow for an individual who is temporarily ill (e.g. has a cold) or who has permanent disability in one dimension, but is still 'well' with regards to other lifestyle dimensions as part of the wellness model. Such an individual would not be accurately placed on a uni-dimensional scale of ill-health-wellness. For example, if a person is receiving treatment requiring hospitalisation for a life-threatening disease can they still be considered well if they are living their potential in other dimensions? A multi-faceted model of wellness would more accurately portray the lifestyle of this person. Although they are likely to have poor physical wellness due to illness, they may have an increased spiritual, social, emotional, and intellectual wellness due to additional visits from family and friends in conjunction with extra time to learn and reflect.

From this perspective wellness is more than a salutogenic concept; it can be conceptualised as a holistic multi-dimensional notion where a person is perceived in terms of their journey towards being the best that they can be, within the environment in which they are situated. The multi-dimensional characteristic of wellness accepts an ecological perspective to human being, in that human beings are at once spiritual, physical, social, intellectual, cognitive and emotional beings. From this perspective, wellness promotion is about identifying and making the best of individual positive and negative constraints as a means to continuing the wellness journey. Wellness differs from health, QOL and well-being in that wellness is interested in the development of individual lifestyle behaviours that *promote* the attainment of optimum functioning and fulfilment.

The difference between wellness and health promotion interventions can be analogously conceptualised as driving a car. The goal of health promotion interventions is to prevent the onset of various chronic diseases and conditions. Hence, the individual is moving away from such outcomes and always 'looking in the rear view mirror'. In contrast, a wellness journey encompasses moving towards an ideal state where the driver is in the present and observing what is ahead, looking forward. This is not to say that positive health outcomes which are a consequence of good health practices should be ignored, but the primary focus is moving towards optimal states on a range of dimensions rather than avoiding or diminishing illness. The context where wellness is applied is therefore of importance. The clinical context is one where clients present with some perceived illness, disease or distress, with the goal of eliminating, minimising or managing that condition. Non-clinical contexts are those where the target population is not defined by illness. Rather, the emphasis is on improvement in populations not defined by health or illness status. Contexts may include (but are not limited to) public health campaigns, group wellness interventions in workplaces, educational institutions, organisations and the like.

With this definition of wellness in mind, the place of the term wellness in organisational contexts becomes

clearer:

1. The evidence suggests that wellness programs work, with benefits for both the organisation and the work force. For organisations, these may include benefits such as improved productivity, reduced absenteeism, reduced medical costs, greater engagement and so on. For employees these might include improved community involvement and personal lifestyle behaviours.
2. Organisations should continue to develop programs. There is a happy nexus between the interests of the individual and that of the organisation. Wellness programs might work best if undertaken as part of a collaboration between employees and employers towards better outcomes for both parties, as opposed to a top-down approach perceived only to benefit the organisation.
3. Wellness programs undertaken by organisations, in organisations, are growing rapidly. A clearer focus may serve to secure these gains, and improve efficiency of programs from the evidence reviewed here, wellness programs might start with a risk management process but ultimately will be designed in unison with participants to help people realise their potential. Programs will include physical, social, emotional, spiritual, intellectual and environmental aspects in an integrated way, in relation to the context of each organisation.
4. In the main, the majority of documented wellness programs presently focus on the physical domain. However, wellness is clearly a multi-dimensional concept that includes spiritual, emotional, social, physical, intellectual and psychological domains. For example, a workplace might encourage social physical activity within the workplace while also enhancing mentor, coaching and career planning opportunities designed for individuals to manage stress and look towards future plans and goals. Future programs need to be more encompassing of all facets of wellness. Spirituality may be a key theme, as it is within most wellness models. For example, organisations might need to consider how their organisation benefits society or what their role is in the large integrated whole. These recognitions provide integrated meaning and focus, share values and determine how individuals ascertain spiritual values within an organisation.
5. Organisations should look beyond physical programs and enhance opportunities for benefit in other domains. For example, while providing gym and/or health assessments is a good starting point for wellness programs, the addition of wellness counsellors or coaches may provide further benefits.
6. As many models consider that changes in spirituality solicit further changes in other domains, organisations may benefit from increased focus on wellness programs with an enhanced focus on spirituality in particular. For example, managers may consider a wellness intervention that focuses on spirituality, where people may recognise that their burdens are shared, rather than feeling that the load is entirely left to them as an individual. These spiritual bonds tend to lead toward goodwill and achievement.
7. Given the impact that leaders have on employees, they should be encouraged to follow suitable lifestyle behaviours and set appropriate examples for their employees. Managers and leaders should consider taking an active role in wellness programs and demonstrate a willingness to adopt positive lifestyle behaviours.
8. Managers and leaders within organisations who authorise wellness programs play a significant role in program outcomes. An appropriate understanding of wellness means leaders can correctly design, and/or select program components which more accurately pertain to wellness and better facilitate wellness programs within their organisations or departments.
9. An increased understanding of the wellness concept also means wellness programs can be more accurately evaluated and compared. Collaboration can accelerate the progressive enhancement of wellness programs, and provide mutual benefits between organisations.
10. Future wellness programs employed by organisations need to be appropriately assessed using standardized criteria. A number of high quality and widely used tools are available, including the Effective Public Health Practice Project's Quality Assessment Tool for Quantitative Studies (Thomas, Ciliska, Dobbins & Micucci, 2004) and the RE-AIM (Reach; Effectiveness; Adoption; Implementation; and Maintenance) framework (Glasgow, Vogt & Boles, 1999). Wellness programs can then incrementally improve based on the findings from these quality assessments, in addition to enabling further ease of comparability between programs.

It is important to note that there were some limitations associated with this review of terminology. As the nature of this review was not systematic, no specific search strategy was used for the identification and selection of included literature. Those wishing to further explore the field of workplace wellness programs can do so using additional search terms such as occupational health, spirituality in business, leadership, and wellness coaching. Future research priorities in this field include randomised controlled trials of workplace wellness interventions, using appropriate outcome measures including assessments of wellness and spirituality. As a consequence of conducting controlled trials which are appropriately assessed and reported, an established body of literature can be developed that can be drawn upon by managers and organisations during the design of future workplace wellness programs.

SUMMARY

While it is inevitable that cross-over exists between similar constructs, wellness does have distinctly identifiable features. Wellness is both holistic and multi-dimensional, with the dimensions being inter-related. The manipulation of one dimension has a reciprocal influence on other dimensions. Wellness is determined, however, not in terms of its individual dimensions but as an integrated whole. Wellness focuses on lifestyle behaviours. While the effectiveness of lifestyle choices can be 'measured' through assessments of well-being, QOL, or other measures (e.g. blood pressure), wellness is an integrated construct determined by behaviours which facilitate the journey towards optimal states on multiple dimensions. Wellness is about actions or processes rather than outcomes. Wellness recognises the inter-relatedness between the person and their environment, where each influences the other. Both goal (or intention) and context differentiate wellness promotion programs, interventions and campaigns, such as those in the workplace or other organisations, from public health promotion. In summary, wellness is concerned with people making appropriate lifestyle choices, with a focus upon a range of positive outcomes across dimensions.

REFERENCES

- Adams, T., Bezner, J., & Steinhardt, M. (1997). The conceptualization and measurement of perceived wellness: integrating balance across and within dimensions. *American Journal Of Health Promotion*, 11(3), 208-218. <http://dx.doi.org/10.4278/0890-1171-11.3.208>
- Baicker, K., Cutler, D., & Song, Z. (2010). Workplace Wellness Programs Can Generate Savings. *Health Affairs*, 29(2), 304-311. <http://dx.doi.org/10.1377/hlthaff.2009.0626>
- Bolnick, H., Millard, F., & Dugas, J. P. (2013). Medical care savings from workplace wellness programs: what is a realistic savings potential? *Journal of Occupational and Environmental Medicine*, 55(1), 4-9. <http://dx.doi.org/10.1097/JOM.0b013e31827db98f>
- Bravo Vergel, Y., & Sculpher, M. (2008). Quality-adjusted life years. *Practical Neurology*, 8(3), 175-182. <http://dx.doi.org/10.1136/pn.2007.140186>
- Breslow, L. (1972). A Quantitative Approach to the World Health Organization Definition of Health: Physical, Mental and Social Well-being. *International Journal of Epidemiology*, 1(4), 347-355. <http://dx.doi.org/10.1093/ije/1.4.347>
- Choate, L. H., & Smith, S. L. (2003). Enhancing development in 1st-year college student success courses: A holistic approach. *Journal of Humanistic Counseling, Education and Development*, 42(2), 178-194.
- Clark, M. M., Warren, B. A., Hagen, P. T., Johnson, B. D., Jenkins, S. M., Werneburg, B. L., & Olsen, K. D. (2011). Stress Level, Health Behaviors, and Quality of Life in Employees Joining a Wellness Center. *American Journal of Health Promotion*, 26(1), 21-25. <http://dx.doi.org/10.4278/ajhp.090821-QUAN-272>
- Coatsworth, J. D., Palen, L., Sharp, E. H., & Ferrer-Wreder, L. (2006). Self-defining activities, expressive identity, and adolescent wellness. *Applied Developmental Science*, 10(3), 157-170. http://dx.doi.org/10.1207/s1532480xads1003_5
- Corbin, C. B., & Pangrazi, R. P. (2001). Toward a Uniform Definition of Wellness: A Commentary: President's Council on Physical Fitness and Sports, 200 Independence Avenue, S.W., Washington, DC 20201. Tel: 202-690-9000; Fax: 202-690-5211. For full text: http://fitness.gov/Reading_Room/Digests/digests.html
- Cruse, R., Nicholas, D. R., Gobble, D. C., & Frank, B. (1992). Gender and wellness: A multidimensional systems

- model for counseling. *Journal of Counseling & Development*. <http://dx.doi.org/10.1002/j.1556-6676.1992.tb02190.x>
- Depken, D. (1994). Wellness through the lens of gender: A paradigm shift. *Wellness Perspectives*, 10(2), 54-69.
- Diener, E., & Eunkook, M. S. (2000). *Measuring subjective well-being to compare the quality of life of cultures*. Cambridge, Massachusetts: MIT Press.
- Dunn, H. (1959). What high-level wellness means. *Canadian Journal of Public Health. Revue Canadienne de Santé Publique*, 50, 447.
- Easthope, G., & White, R. (2006). Health and Well-being: How Do Young People See These Concepts? *Youth Studies Australia*, 25(1), 42.
- Eberst, R. (1984). Defining Health: A Multidimensional Model. *Journal of School Health*, 54(3), 99-104. <http://dx.doi.org/10.1111/j.1746-1561.1984.tb08780.x>
- Felce, D., & Perry, J. Quality of life: Its definition and measurement. *Research in Developmental Disabilities*, 16(1), 51-74. [http://dx.doi.org/10.1016/0891-4222\(94\)00028-8](http://dx.doi.org/10.1016/0891-4222(94)00028-8)
- Fontaine, K. R., & Barofsky, I. (2001). Obesity and health-related quality of life. *Obesity Reviews*, 2(3), 173-182. <http://dx.doi.org/10.1046/j.1467-789x.2001.00032.x>
- Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: The RE-AIM framework. *American Journal of Public Health*, 89(9), 1922-1927.
- Gosliner, W. A., James, P., Yancey, A. K., Ritchie, L., Studer, N., & Crawford, P. B. (2010). Impact of a Worksite Wellness Program on the Nutrition and Physical Activity Environment of Child Care Centers. *American Journal of Health Promotion*, 24(3), 186-189. <http://dx.doi.org/10.4278/ajhp.08022719>
- Greenberg, J. S. (1985). Health and Wellness: A Conceptual Differentiation. *Journal of School Health*, 55(10), 403-406. <http://dx.doi.org/10.1111/j.1746-1561.1985.tb01164.x>
- Gupta, B., & Kant, S. (2009). Health related quality of life (Hrql) in COPD.(Report). *The Internet Journal of Pulmonary Medicine*, 11(1), NA.
- Harmer, R. (2010). What are we really talking about when we say the word 'spirituality'? *Spirituality, Leadership and Management*, 4(1), 105.
- Hettler, B. (1980). Wellness Promotion on a University Campus. *Family & Community Health*, 3(1), 77-95. <http://dx.doi.org/10.1097/00003727-198005000-00008>
- Hyatt Neville, B., Merrill, R. M., & Kumpfer, K. L. (2011). Longitudinal Outcomes of a Comprehensive, Incentivized Worksite Wellness Program. *Evaluation & the Health Professions*, 34(1), 103-123. <http://dx.doi.org/10.1177/0163278710379222>
- Jayawickreme, E., Forgeard, M. J. C., & Seligman, M. E. P. (2012). The engine of well-being. *Review of General Psychology*, 16(4), 327-342. <http://dx.doi.org/10.1037/a0027990>
- Kuoppala, J. (2008). Leadership, job well-being, and health effects--a systematic review and a meta-analysis. *Journal of Occupational and Environmental Medicine*, 50(8), 904-915. <http://dx.doi.org/10.1097/JOM.0b013e31817e918d>
- Lafferty, J. (1979). A Credo for Wellness. *Health Education*, 10(5), 10-11.
- Larson, J. H., Wilson, S. M., & Beley, R. (1988). The Assessment of Family Wellness in a University Employee Wellness Program. *American Journal of Health Promotion*, 2(3), 20-30. <http://dx.doi.org/10.4278/0890-1171-2.3.20>
- Leafgren, F. (1990). Being a man can be hazardous to your health: Life-styles issues. In D. Moore & F. Leafgren (Eds.), *Problem-solving strategies for interventions for men in conflict*. Alexandria, VA: American Association for Counseling and Development.
- Lovelace, K. J., Manz, C. C., & Alves, J. C. (2007). Work stress and leadership development: The role of self-leadership, shared leadership, physical fitness and flow in managing demands and increasing job control. *Human Resource Management Review*, 17(4), 374-387. <http://dx.doi.org/10.1016/j.hrmr.2007.08.001>

- Lundqvist, C. (2011). Well-being in competitive sports – The feel-good factor? A review of conceptual considerations of well-being. *International Review of Sport and Exercise Psychology*, 4(2), 109-127. <http://dx.doi.org/10.1080/1750984X.2011.584067>
- Machen, R., Cuddihy, T. F., Reaburn, P., & Higgins, H. C. (2010). Development of a workplace wellness promotion pilot framework : a case study of the Blue Care Staff Wellness Program. *Asia-Pacific Journal of Health, Physical Education and Recreation*, 1(2), 13-20. <http://dx.doi.org/10.1080/18377122.2010.9730327>
- Mackey, S. (2000). Towards a definition of wellness. *The Australian Journal of Holistic Nursing*, 7(2), 34-38.
- Megill, L. (2006). Culture of Wellness. *Leadership for Student Activities*, 34, 28-32.
- Miller, D. N., Martens, M. P., & Gilman, R. (2008). Wellness promotion in the schools: Enhancing students' mental and physical health. *Psychology in the Schools*, 45(1), 5-15. <http://dx.doi.org/10.1002/pits.20274>
- Myers, J. E., & Sweeney, T. J. (2004). The indivisible self: An evidence-based model of wellness. *The Journal of Individual Psychology*, 60(3), 234-244.
- Myers, J. E., Sweeney, T. J., & Luecht, R. M. (2004). The factor structure of wellness: Reexamining theoretical and empirical models underlying the Wellness Evaluation of Lifestyle (WEL) and the Five-Factor Wel. *Measurement and Evaluation in Counseling and Development*, 36(4), 194-208.
- Myers, J. E., Sweeney, T. J., & Witmer, J. M. (2000). The wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counseling and Development : JCD*, 78(3), 251. <http://dx.doi.org/10.1002/j.1556-6676.2000.tb01906.x>
- O'Donnell, M. P. (2010). Federal grants to small employers for comprehensive wellness programs: passed as part of health care reform. *American Journal of Health Promotion*, 25(1). <http://dx.doi.org/10.4278/ajhp.25.1.iv>
- Renger, R. F., Midyett, S. J., Mas, F. G. S., Erin, T. D., McDermott, H. M., Papenfuss, R. L., . . . Hewitt, M. J. (2000). Optimal Living Profile: an inventory to assess health and wellness. *American Journal of Health Behavior*, 24(6), 403-412. <http://dx.doi.org/10.5993/AJHB.24.6.1>
- Roscoe, L. J. (2009). Wellness: A review of theory and measurement for counselors. *Journal of Counseling and Development*, 87(2), 216-226. <http://dx.doi.org/10.1002/j.1556-6678.2009.tb00570.x>
- Ryan, R. M., & Deci, E. L. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. [Article]. *Annual Review of Psychology*, 52(1), 141.
- Ryff, C. D. (2004). Positive health: connecting well-being with biology. *Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences*, 359(1449), 1383-1394. <http://dx.doi.org/10.1098/rstb.2004.1521>
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719-727. <http://dx.doi.org/10.1037/0022-3514.69.4.719>
- Ryff, C. D., & Singer, B. (1998). The Contours of Positive Human Health. *Psychological Inquiry*, 9(1), 1-28. http://dx.doi.org/10.1207/s15327965pli0901_1
- Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York: Free Press.
- Smith-Adcock, S., Webster, S., Leonard, L., & Walker, J. (2008). Benefits of a holistic group counseling model to promote wellness for girls at risk for delinquency: An exploratory study. *Journal of Humanistic Counseling, Education and Development*, 47(1), 111-126. <http://dx.doi.org/10.1002/j.2161-1939.2008.tb00051.x>
- Smith, B. J., Tang, K. C., & Nutbeam, D. (2006). WHO health promotion glossary: New terms. *Health Promotion International*, 21(4), 340-345. <http://dx.doi.org/10.1093/heapro/dal033>
- Stevens, M. M., Paine-Andrews, A., & Francisco, V. T. (1996). Improving Employee Health and Wellness: A Pilot Study of the Employee-driven Perfect Health Program. *American Journal of Health Promotion*, 11(1), 12-14. <http://dx.doi.org/10.4278/0890-1171-11.1.12>
- Sweeney, T. J., & Witmer, J. M. (1991). Beyond Social Interest: Striving toward Optimum Health and Wellness. *Individual Psychology: The Journal of Adlerian Theory, Research & Practice*, 47(4), 527.

Tanigoshi, H., Kontos, A. P., & Remley, T. P. (2007). The effectiveness of individual wellness counseling on the wellness of law enforcement officers. *Journal of Counseling & Development*, 86(1), 64-74.
<http://dx.doi.org/10.1002/j.1556-6678.2008.tb00627.x>

Thomas, B. H., Ciliska, D., Dobbins, M., & Micucci, S. (2004). A process for systematically reviewing the literature: providing the research evidence for public health nursing interventions. *Worldviews on evidence-based nursing*, 1(3), 176-184.

Travis, J. (1977). *Wellness Workbook for Health Professionals*. Mill Valley: Wellness Resource Centre.

Weinstein, M. C., & Stason, W. B. (1977). Foundations of cost-effectiveness analysis for health and medical practices. *New England Journal of Medicine*, 296(13), 716-721.
<http://dx.doi.org/10.1056/NEJM197703312961304>

Williams, S., & Bruno, A. (2007). Worksite Wellness Programs — What Is Working. *American Journal of Men's Health*, 1(2), 154-156. <http://dx.doi.org/10.1177/1557988306295022>

Witmer, J. M., & Sweeney, T. J. (1992). A Holistic Model for Wellness and Prevention Over the Life Span. *Journal of Counseling & Development*, 71(2), 140-148. <http://dx.doi.org/10.1002/j.1556-6676.1992.tb02189.x>

World Health Organization. (1 946). Preamble to the Constitution of the World Health Organization.